

I claim:

- 5 1. A tothing assembly comprising tothing means having two toothed rack means
 and a gear defining an axis and arranged to roll along said stationary tothing
 means and to pass, during its rolling motion, from one of said toothed rack means
 to the other one, wherein a change-over tothing means is provided between said
 toothed rack means, said change-over tothing means extending non-smoothly with
10 respect to said toothed rack means to generate a trajectory of the axis of said rolling
 gear relative to said tothing means, said trajectory having a discontinuity of its
 tangent in a salient point.
- 15 2. A tothing assembly as claimed in claim 1, wherein a relief is provided between
 said two toothed rack means to prevent simultaneous contact of said gear with said
 two toothed rack means.
- 20 3. A tothing assembly as claimed in claim 2, wherein said change-over tothing
 means is a toothed arc convex towards said gear.
- 25 4. A tothing assembly as claimed in claim 3, wherein
- said gear defines a notional reference circle and said two toothed rack means
 define notional reference curves, said notional reference circle having
25 common tangents with each of said reference curves of said two toothed rack
 means, when said axis defined by said gear is in said salient point of said
 trajectory, and
 - said convex toothed arc defines a further reference circle, said further
30 reference circle having a tangent in common with the reference circle of said
 gear.

5. A tothing assembly as claimed in claim 2, wherein said change-over tothing means is a linear toothed rack.
- 5 6. A tothing assembly as claimed in claim 2, wherein said change-over tothing means consists of one single tooth.
7. A tothing assembly as claimed in claim 1, wherein said gear, when engaging said change-over tothing means is arranged to leave the engagement with one of said toothed rack means immediately before it engages the other one of said toothed rack means.
- 10 8. A tothing assembly as claimed in claim 1, wherein said reference curves of said two toothed rack means are concave-arcuate.